

## **REMARKS**

### **Status of the Claims**

With entry of the amendments listed above, claims 1 to 5 are pending. Without prejudice or disclaimer, claim 1 has been amended. Exemplary support for the amendments to claim 1 can be found, in the original claims and specification as-filed, including at least, for example, at page 9, lines 6-11 and page 10, lines 5-9. As such, there is no issue of new matter.

### **Rejections under 35 U.S.C. § 103(a)**

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious in view of *Kawahara* et al. (JP-2004-099696). Specifically, the Office alleges that *Kawahara* “teaches a method for deproteinizing natural rubber latex (§0001) comprising adding a urea denaturing agent (§0008-09) and a surface active agent/surfactant (§0015) to a natural rubber latex (§0010); mixing and agitating the mixture (§0028); and separating the denatured proteins from the rubber latex (§0014).” Office Action at page 2. The Office admits that *Kawahara* “does not teach the mixing as occurring during the transportation through a fluid channel.” *Id.* Regardless, the Office alleges that such a limitation is obvious to one skilled in the art, citing MPEP § 2144.04. *Id.*

The Office has also rejected claims 1 to 5 as allegedly obvious in view of *Saito* et al. (Purification of Natural Rubber with Urea, Proceedings of the 16<sup>th</sup> Elastomer Forum of the Society of Rubber Industry, Japan, Published December 4, 2003) and Trautman (U.S. 5,777,004). Specifically, the Office alleges that *Saito* “teaches a method of denaturing natural rubber latex (page 1) comprising adding a urea denaturing agent and a surfactant to a natural rubber latex (page 1); and centrifuging the mixture at 10,000 G (page 1).” Office Action at page 3. While acknowledging *Saito* “doesn’t teach agitating the mixture,” the Office cites Trautman for allegedly teaching “agitating a mixture of a natural rubber latex and a denaturing agent.” *Id.* The Office supports this combination, alleging that Trautman is analogous art. *Id.* Further, the Office alleges it “would have been obvious to a person having ordinary skill in the art at the time of invention to have agitated the mixture of *Saito* et al. as in Trautman and the motivation to do so would have been, as Trautman suggests, to ensure complete hydrolysis of the proteins.” *Id.*

The Office admits that *Saito* “does not teach the mixing as occurring during the transportation through a fluid channel.” *Id.* Regardless, the Office alleges that such a limitation is obvious to one skilled in the art, citing MPEP § 2144.04. *Id.*

Applicant respectfully traverses both rejections. The Examiner has not considered the entire scope of the claim in making his rejection. Currently pending claim 1 recites that the “the proteins are sufficiently denatured in 5 to 10 minutes.” This time element is not found in any of the references that serve as a basis for the 103(a) rejection. In fact, the process of each cited reference takes place over a timeframe of at least one hour. The addition of the surfactant and urea to flowing raw natural rubber latex, as presently claimed, is understood to create a turbulent flow that quickly stirs the mixture. It is this turbulent flow that allows the proteins and denaturing agent to contact each other in a short time, greatly reducing the overall time of denaturing the proteins. The Office relies on MPEP § 2144.04(V) to support the conclusion that converting a batch process (e.g. the processes of *Kawahara* and *Saito*) into a continuous process is within the knowledge of one skilled in the art. However, Applicants submit that that one of ordinary skill in the art would not have expected such a great reduction in the time for substantial denaturing of the proteins, based on what it taught and known in the art. As such, Applicant respectfully requests that the rejections under § 103(a) be withdrawn.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

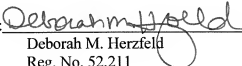
If the Office believes a telephone conference could be useful in resolving any outstanding issues, it is respectfully invited to contact Applicant’s undersigned counsel at (202) 408-4368.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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By:   
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